

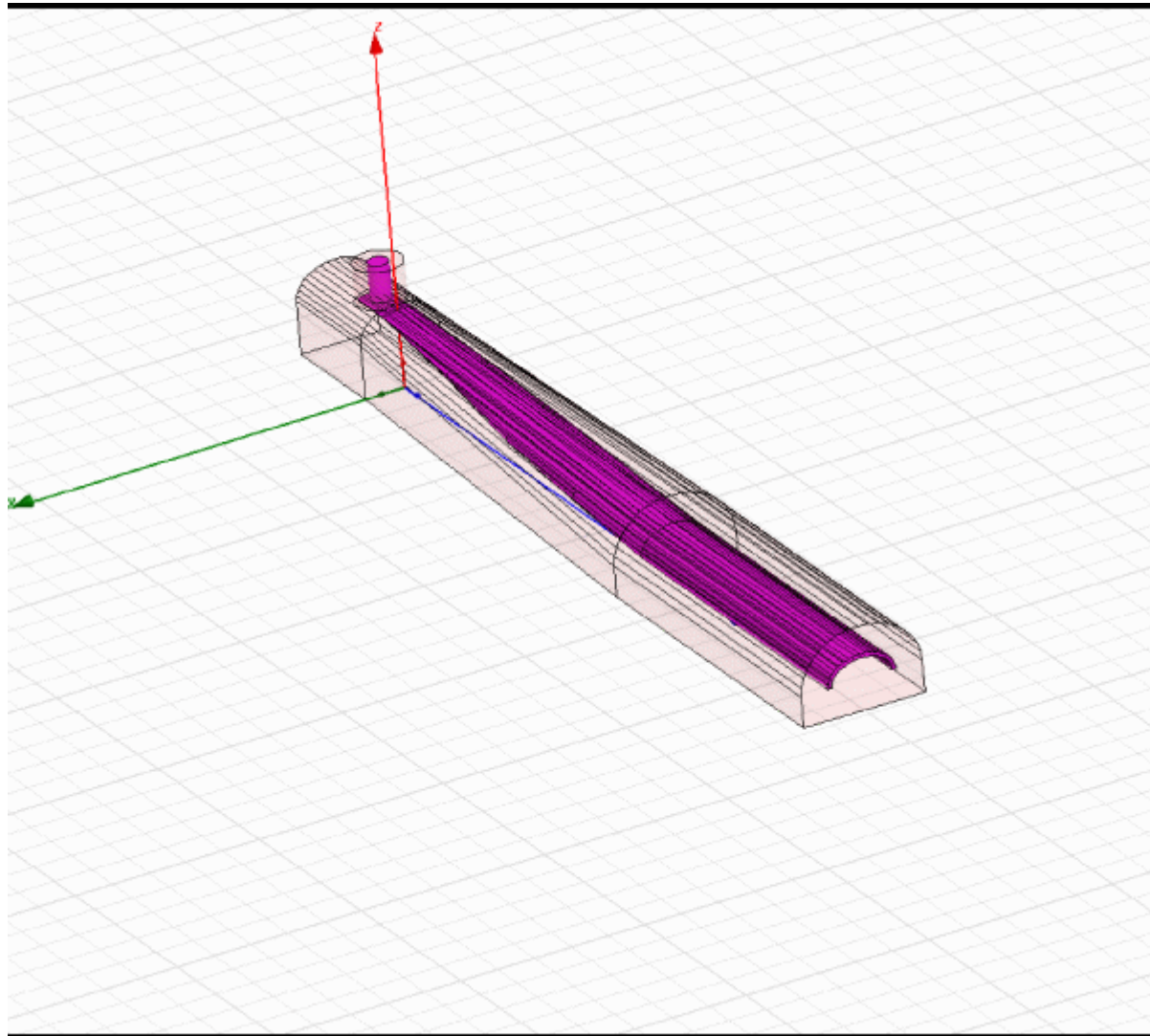
# Dark Current Kicker Progress Report

C.Y. Tan  
05 Dec 2007

# What's happening ...

- MOU between INFN and Fermilab had been sent to them
  - The INFN group is happy with the MOU.
    - Presently “LNF Director has started the procedure for the signature of the Addendum to the MOU between INFN and Fermilab: this will be approved by board of Directors and signed by the President” -- Susanna Guiducci
    - Should be ready at the beginning of December.
- Jim Steimel, Ding Sun and I spoke to Susanna when she was here at the ILC Workshop (22-26 Oct 2007).
  - Get specific drawings.
  - Discussed possibility of INFN making the feedthru's for us.

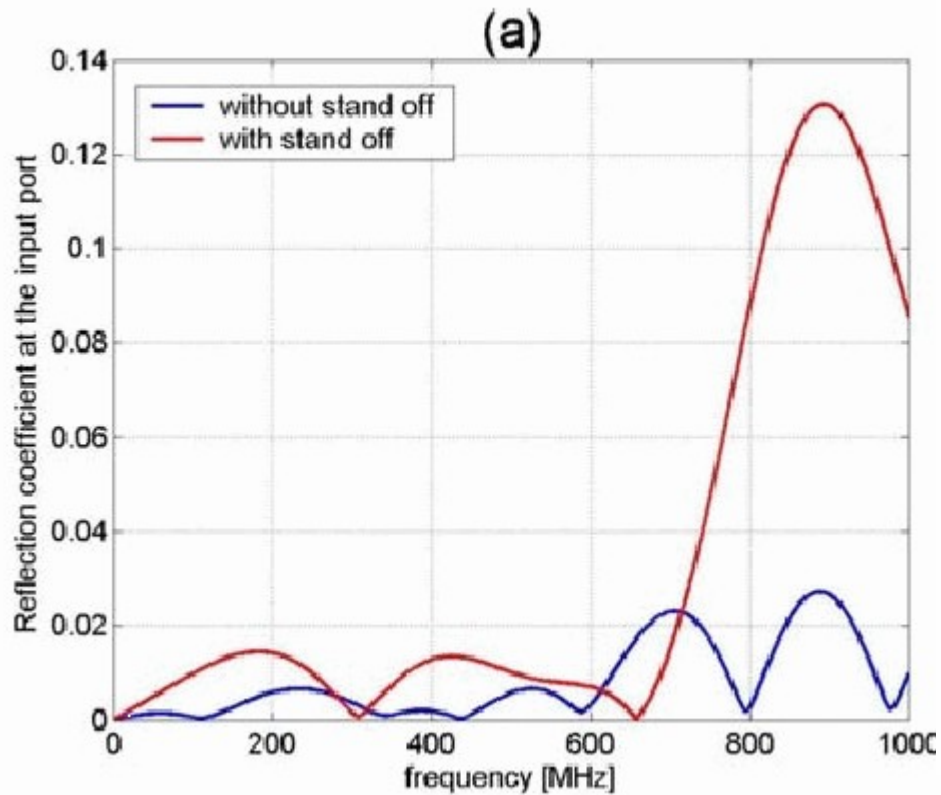
# The Frascati kicker



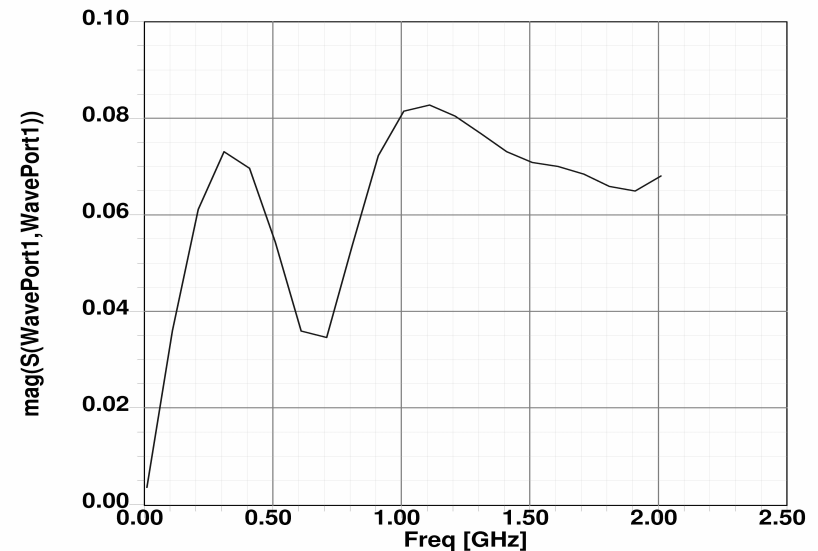
This is **not** the NML design. We will use this design as baseline for our simulations.

We want to get approx. the same S11 as what they have and then change geometry from there keeping same S11.

# INFN HFSS Simulation Results



05 Dec 2007      infn\_9\_1      09:31:21 AM  
15 pass, 140826 tetrahedra, delta S: 0.000965  
S11      INFN Kicker



# Feedthru's closer by 27cm

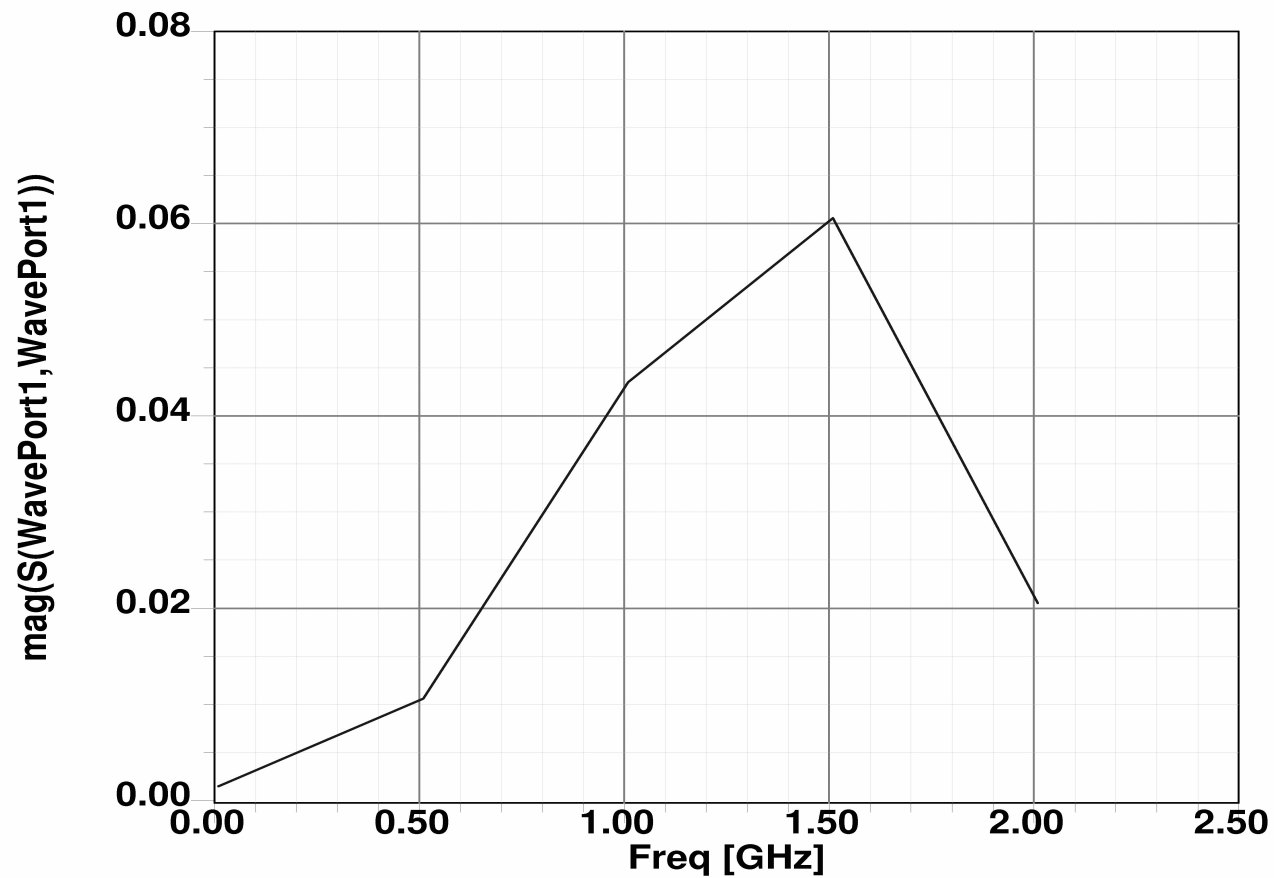
04 Dec 2007

infn\_14\_1

04:08:23 PM

15 pass, 105728 tetrahedra, delta S: 0.000614

S11 (Modified INFN Kicker)



# Goal

- Try to get our simulation to (dis)agree with the INFN simulations.
- More importantly, try to get the actual measured results from INFN.
- Get sample feedthru' here.
- Hopefully get better response time from INFN once MOU is formally signed.